USCMS Engineer Status Report for October 2003

Michael Case

December 7, 2003

1 Work Performed This Month

acation Sept. 28th - Oct. 7th.
DDD:

I travelled to Fermilab to talk to HCAL experts (V. Daniel Elvira and Shuichi Kunori) in order to help with creating more maintainable XML files for the HCAL geometry defined by the DDD. The week was productive in the sense that I learned quite a bit about the structure of the HCAL files and of the real detector as well. Some work was performed to use the existing algorithmic positioning that was available in the DDD. Also, it became more apparent that the DDD needed some more flexible and powerful algorithmic positioning system. Through discussions with Martin we decided that at the next CPT week (November 2003) we would finalize the design so we could write the code. We discussed via e-mail some of these ideas before hand.

I created a first attempt at the XML for the Muon Endcap testbeam 2003 using the generated files.
CMS Developmental Grid Testbed

Efforts here have been stalled while working on the above. This was placed at a lower priority after conversations with Robert Clare, Ian Fisk and others.
User Support

I continued to help the undergraduate students at UCD regarding use of CMS software.

I continued to work on the cluster a little bit as possible. The linux cluster is not a high priority either but we do need the machines and it would be

very useful for me (speed-wise) if I could get a functioning Iguana locally for use in debugging, creating and helping with the XML geometry files.

2 Plans For Next Month

DDD:

Plan on the algorithm enhancements, adding more data structures to our Constant and SpecPar elements. These enhancements are necessary because of user input (users find the current algorithm insufficient).

Conditions DB

Continue to participate in discussions both at CERN and with the group developing around HCAL and Endcap Muon groups. Find out what I can at CPT week.

User Support

Continue to work on our UCD CMS cluster to make it more useful.